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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/021,943	12/12/2001	Brian Holtz	0007056-0223/P5924	2740

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EXAMINER

ALI, MOHAMMAD

ART UNIT PAPER NUMBER

2167

DATE MAILED: 01/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/021,943

Applicant(s)

HOLTZ ET AL.

Examiner

Mohammad Ali

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2004.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-24 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 30 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4-16-04.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This communication is responsive to the amendments filed on June 30, 2004.

Claims 1-24 are pending in this Office Action.

Response to Arguments

2. After further search and a thorough examination of the present application, claims 1-24 remain rejected.

Applicants' arguments with respect to claims 1-24 have been considered, but they are not deemed to be persuasive.

First, Applicant's argue that "Prima facie case of obviousness have not been established".

In response to the applicant's argument the Examiner respectfully submits that Prima facie case of obviousness have been established because combination of references teaches all the limitations as claimed by the applicant.

Second, Applicant's argue that Henson and Odom do not teach "comparing the first file structure to the second file structure".

In response to applicant's arguments the Examiner respectfully submits that Henson teaches this particular limitation as, the data structures created by a remote mount operation compare (more than one file structure) to those created by mounting a local entity in the following ways: Just as in the local case, a remote mount creates a vfs in the client node (e.g., block 54). Just as in the local case, use of a file in a virtual file system which contains remote files creates a vnode structure in the client node (e.g.,

block 57). Just as in the local case, the vnode structure has a pointer to a inode table entry (e.g., block 63). With the remote operation compare more than one file structures. (see col. 13, lines 57-66, Henson).

Third, Applicant's argue that Henson and Odom do not teach "transforming file structure".

In response to applicant's arguments the Examiner respectfully submits that Henson does not explicitly indicate this particular limitations, the teachings of Odom remedy such kinds deficiency by teaching "neutral form gives to rise to greatly simplified modeling techniques, parallel processing in both data storage and retrieval operations, and simplified transfer of all or portions of the stored data", see col. 8, lines 32-34, Odom. It would have been obvious to one ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references, because transforming file structure of Odom's teachings would have allowed Henson's system to generate the data to reduce the degree of difficulty involved in the many interpretive aspects, as suggested by Odom at col. 2, lines 11-13. Further, transforming file structure as taught by Odom improves to create a storage format which enables to direct integration of different models in dynamic evolution (see col. 1, lines 12-15, Odom).

Fourth, Applicant's argue that Henson and Odom do not teach "generation one or more changes that transform said first file structure to said second file structure".

In response to applicant's arguments the Examiner respectfully submits that Henson teaches this particular limitation as, the flaw is prevented by use of the inode

generation number. The inode generation number is stored on disk as a field in the inode. When the server deletes 'change' a file, it increments the inode generation number. If a request arrives at a server, the file handle is broken apart, the device number and inode number are used to locate the inode, and then the file handle inode generation number is compared to the inode's inode generation number (see col. 14, lines 39-47, Henson). Henson does not explicitly indicate the transform, the teachings of Odom remedy such kinds deficiency by teaching "neutral form gives to rise to greatly simplified modeling techniques, parallel processing in both data storage and retrieval operations, and simplified transfer of all or portions of the stored data", see col. 8, lines 32-34, Odom. It would have been obvious to one ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references, because transforming file structure of Odom's teachings would have allowed Henson's system to generate the data to reduce the degree of difficulty involved in the many interpretive aspects, as suggested by Odom at col. 2, lines 11-13. Further, transforming file structure as taught by Odom improves to create a storage format which enables to direct integration of different models in dynamic evolution (see col. 1, lines 12-15, Odom).

Fifth, Applicant's argue that Henson and Odom do not teach "a sequence of log changes".

In response to applicant's arguments the Examiner respectfully submits that Henson teaches this particular limitation as, the user must have a separate "login" on

all the systems that are to be accessed. This provides the security necessary to protect the integrity of the system (see col. 2, lines 41-43, Henson).

Hence, Applicants' arguments do not distinguish over the claimed invention over the prior art of record.

In light of the foregoing arguments, the 103 rejections are hereby sustained.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Henson et al. ('Henson' hereinafter), US Patent 5,20,971 in view of Odom et al. ('Odom' hereinafter), US Patent 5,842,213.

With respect to claim 1,

Henson discloses a method for comparing file tree descriptions (see col. 6, lines 41-61) comprising:

obtaining a first file structure (see col. 13, lines 51-55);

obtaining a second file structure (see col. 13, lines 60-66, Fig. 7);

comparing said first file structure to said second file structure (see col. 13, lines 57-60 et seq); and

generating one or more changes that transform said first file structure to said second file structure (see col. 6, lines 56-61).

Henson does not explicitly indicate the claimed "transforming file structure".

Odom discloses the claimed transforming file structure (neutral form gives to rise to greatly simplified modeling techniques, parallel processing in both data storage and retrieval operations, and simplified transfer of all or portions of the stored data, see col. 8, lines 32-34 et seq).

It would have been obvious to one ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references, because transforming file structure of Odom's teachings would have allowed Henson's system to generate the data to reduce the degree of difficulty involved in the many interpretive aspects, as suggested by Odom at col. 2, lines 11-13. Further, transforming file

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structure as taught by Odom improves to create a storage format which enables to direct integration of different models in dynamic evolution (see col. 1, lines 12-15, Odom).

As to claim 2,

Henson teaches wherein said comparing further comprises: recursively walking said first file structure (see col. 26, lines 65-67 et seq).

As to claim 3,

Henson teaches wherein said changes comprise a sequence log of changes (see col. 9, lines 19-24 and col. 23, lines 16-27 et seq).

As to claim 4,

Henson teaches wherein said first file structure is a file tree index (see col. 13, lines 51-66 et seq).

As to claim 5,

Henson teaches wherein said second file structure is a file tree index (see col. 8, lines 33-47 et seq).

As to claim 6,

Henson teaches wherein said comparing further comprises: comparing one or more folders of said first file structure along with its children with a corresponding folder along with its children in said second file structure (see col. 8, lines 39-47 and col. 13, lines 57-60).

As to claim 7,

Henson teaches optimizing said sequenced log of changes (see col. 19, lines 1-4 et seq).

As to claim 8,

Henson teaches wherein said optimizing further comprising: transforming a plurality of operations in said sequenced log of changes to a single operation (see col. 19, lines 34-60 and Fig. 2 et seq).

Claims 9-16 have same subject as of claims 1-8 except configuration as described above and Henson teaches at col. 14, lines 20-29 and essentially rejected for the same reasons as described above.

Henson does not explicitly indicate the claimed "transforming file structure".

Odom discloses the claimed transforming file structure (neutral form gives to rise to greatly simplified modeling techniques, parallel processing in both data storage and retrieval operations, and simplified transfer of all or portions of the stored data, see col. 8, lines 32-34 et seq).

It would have been obvious to one ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references, because transforming file structure of Odom's teachings would have allowed Henson's system to generate the data to reduce the degree of difficulty involved in the many interpretive aspects, as suggested by Odom at col. 2, lines 11-13. Further, transforming file structure as taught by Odom improves to create a storage format which enables to direct integration of different models in dynamic evolution (see col. 1, lines 12-15, Odom).

Claims 17-24 have subject matter as of claims 1-16 except "a computer usable medium having computer readable program code embodied therein for comparing file tree descriptions, said computer program product" and Henson teaches at col. 12, lines 24-35 et seq and essentially rejected for the same reasons as described above.

Henson does not explicitly indicate the claimed "transforming file structure".

Odom discloses the claimed transforming file structure (neutral form gives to rise to greatly simplified modeling techniques, parallel processing in both data storage and retrieval operations, and simplified transfer of all or portions of the stored data, see col. 8, lines 32-34 et seq).

It would have been obvious to one ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references, because transforming file structure of Odom's teachings would have allowed Henson's system to generate the data to reduce the degree of difficulty involved in the many interpretive aspects, as suggested by Odom at col. 2, lines 11-13. Further, transforming file structure as taught by Odom improves to create a storage format which enables to direct integration of different models in dynamic evolution (see col. 1, lines 12-15, Odom).

Conclusion

5. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of Time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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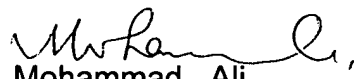
TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad Ali whose telephone number is (571)272-4105. The examiner can normally be reached on Monday-Thursday (7:30 am-6:00 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E Breene can be reached on (571)272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Mohammad Ali
Primary Examiner
Art Unit 2167

MA
December 23, 2004